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## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

19 OCT 2004

| International application No.  International filing date (day/month/year)  PCT/US03/12520  23 April 2003 (23.04.2003)  International Patent Classification (IPC) or national classification and IPC  IPC(7): B29D 22/00, B32B 15/04 and US Cl.: 428/36.3,293.1  Applicant  HIEL, CLEM, et. al.  1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.  2. This REPORT consists of a total of sheets, including this cover sheet.  This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT These annexes consist of a total of sheets.  3. This report contains indications relating to the following items: |  |  |  |  |  |  |
|---|--|--|--|--|--|--|
| PCT/US03/12520  23 April 2003 (23.04.2003)  International Patent Classification (IPC) or national classification and IPC  IPC(7): B29D 22/00, B32B 15/04 and US Cl.: 428/36.3,293.1  Applicant  HIEL, CLEM, et. al.  1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.  2. This REPORT consists of a total of sheets, including this cover sheet.    This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT These annexes consist of a total of sheets.  |  |  |  |  |  |  |
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|   |  |  |  |  |  |  |
| 3. This report contains indications relating to the following items:  |  |  |  |  |  |  |
|   |  |  |  |  |  |  |
| I Basis of the report   |  |  |  |  |  |  |
| n Priority  |  |  |  |  |  |  |
| III Non-establishment of report with regard to novelty, inventive step and industrial applicability   |  |  |  |  |  |  |
| IV Lack of unity of invention   |  |  |  |  |  |  |
| A ride 25(2) with regard to povelty inventive step or industrial  |  |  |  |  |  |  |
| Reasoned statement under Article 35(2) with regard to hoverly, inventive step of applicability; citations and explanations supporting such statement  |  |  |  |  |  |  |
| VI Certain documents cited  |  |  |  |  |  |  |
| VII Certain defects in the international application  |  |  |  |  |  |  |
| VIII Certain observations on the international application  |  |  |  |  |  |  |
|   |  |  |  |  |  |  |
| Date of submission of the demand  Date of completion of this report   |  |  |  |  |  |  |
| 22 September 2003 (22.09.2003) 04 February 2004 (04.02.2004)  |  |  |  |  |  |  |
| Name and mailing address of the IPEA/US  Authorized officer   |  |  |  |  |  |  |
| Mail Stop PCT, Attn: IPEA/US Commissioner for Patents  Ula C Ruddock  |  |  |  |  |  |  |
| P.O. Box 1450 Alexandria, Virginia 22313-1450  Facsimile No. (703)305-3230  Telephone No. 571-272-1200  |  |  |  |  |  |  |

Form PCT/IPEA/409 (cover sheet)(July 1998)

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MINATION REPORT

| International application No. |  |  |  |  |
|-------------------------------|--|--|--|--|
| PCT/US03/12520                |  |  |  |  |

|   | Basis of the report  |  |  |  |  |
|---|--|--|--|--|--|
| _<br>i .  | With regard to the elements of the international application:*   |  |  |  |  |
|   | the international application as originally filed.   |  |  |  |  |
|   | the description:   |  |  |  |  |
|   | pages 1-49 as originally filed   |  |  |  |  |
|   | pages NONE , filed with the demand   |  |  |  |  |
|   | pages NONE, filed with the letter of   |  |  |  |  |
|   | the claims:  |  |  |  |  |
|   | pages 50-63 , as originally filed  |  |  |  |  |
|   | pages 50-63 , as originally filed pages NONE , as amended (together with any statement) under Article 19 pages NONE , filed with the demand  |  |  |  |  |
|   | pages NONE , filed with the letter of  |  |  |  |  |
|   |  |  |  |  |  |
|   | the drawings: pages 1-11, as originally filed  |  |  |  |  |
|   | pages NONE filed with the demand   |  |  |  |  |
|   | pages NONE, filed with the letter of   |  |  |  |  |
|   | the sequence listing part of the description:  |  |  |  |  |
|   | pages NONE as originally filed   |  |  |  |  |
|   | pages NONE , filed with the demand   |  |  |  |  |
|   | pages NONE, filed with the letter of  2. With regard to the language, all the elements marked above were available or furnished to this Authority in the   |  |  |  |  |
| 1   | 2. With regard to the language, all the elements market above were available of taributed the international application was filed, unless otherwise indicated under this item.                                     |  |  |  |  |
|   | These elements were available or furnished to this Authority in the following language which is:   |  |  |  |  |
|   | the language of a translation furnished for the purposes of international search (under Rule23.1(b)).  |  |  |  |  |
| l   | the language of publication of the international application (under Rule 48.3(b)).   |  |  |  |  |
|   | the language of the translation furnished for the purposes of international preliminary examination (under Rules   |  |  |  |  |
|   | 55.2 and/or 55.3).   |  |  |  |  |
|   | 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the  |  |  |  |  |
| l   | international preliminary examination was carried out on the basis of the sequence listing:  |  |  |  |  |
|   | contained in the international application in printed form.  |  |  |  |  |
|   | filed together with the international application in computer readable form.   |  |  |  |  |
|   | furnished subsequently to this Authority in written form.  |  |  |  |  |
|   | furnished subsequently to this Authority in computer readable form.  |  |  |  |  |
|   | The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the  |  |  |  |  |
| l   | international application as filed has been furnished.   |  |  |  |  |
|   | The statement that the information recorded in computer readable form is identical to the written sequence listing   |  |  |  |  |
|   | has been furnished.  |  |  |  |  |
| ١   | 4. The amendments have resulted in the cancellation of:  |  |  |  |  |
| ١   | the description, pages NONE  |  |  |  |  |
| l   |  |  |  |  |  |
|   | the claims, Nos. NONE  |  |  |  |  |
|   | the drawings, sheets/fig NONE  |  |  |  |  |
|   | 5. This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).** |  |  |  |  |
|   | * Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in  |  |  |  |  |
| this report as "originally filed" and are not annexed to this report since they do not contain amendments (killes /0.16 and /0.17). |  |  |  |  |  |
|   | ** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.   |  |  |  |  |

Form PCT/IPEA/409 (Box I) (July 1998)

International application No. PCT/US03/12520

| INTERNATIONAL PRELIMINAR  | PC1/0S03/12320 |   |  |  |  |  |  |
|---|----------------|---|--|--|--|--|--|
| V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |                |   |  |  |  |  |  |
| 1. STATEMENT  |                |   |  |  |  |  |  |
| Novelty (N)   | Claims 1-101   | YES   |  |  |  |  |  |
| Hoverty (14)  | Claims NONE    | NO  |  |  |  |  |  |
|   | 4 404          | YES   |  |  |  |  |  |
| Inventive Step (IS)   | <del></del>    | NO  |  |  |  |  |  |
|   | Clamis NONE    |   |  |  |  |  |  |
| Industrial Applicability (IA)   |                | YES   |  |  |  |  |  |
|   | Claims NONE    | NO  |  |  |  |  |  |
| Claims 1-101 meet the criteria set out in PCT Artican be made or used in industry.  NEW CITATIONS   |                | strial applicability because the subject matter claimed |  |  |  |  |  |
|   |                |   |  |  |  |  |  |

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